

Research Article

<http://zoobank.org/urn:lsid:zoobank.org:pub:7C8A1B26-F58A-4CCD-8758-BB1B247C5B50>

New records of Dolichopodidae from Pskov Region of Russia (Diptera, Empidoidea)

Igor Ya. Grichanov¹ Elena I. Ovsyannikova

Abstract: New records of Dolichopodidae from Pskov Region of Russia (Diptera, Empidoidea). – *Cesa News* 110: 1-5, 5 figs.

New data on *Dolichopodidae* from the Pskov Region of Russia resulting from the short-term visit (August, 2015) are presented. Twelve species are collected and seven species are firstly recorded for the Region. Light micrographs of key characters of some species are included.

Key words: *Diptera, Empidoidea, Dolichopodidae*, fauna, Pskov Region, Russia, new records.

Introduction

The most comprehensive review of *Dolichopodidae* from Pskov Region of Russia was published by the authors of this paper (Grichanov & Ovsyannikova, 2002), who listed 87 species. One missing species (*Dolichopus apicalis* Zetterstedt, 1849) was mentioned in the “Palaeartic Diptera Catalog” (Negrobov, 1991), and one more (*Dolichopus rupestris* Haliday, 1833) was included in the handbook “Insects of Pskov Region” (Antipova & Baikova, 2002) without providing material and localities. Przhiboro & Grichanov (2003) added *Achalcus thalhammeri* Lichtwardt, 1913, and *Dolichopus caligatus* Wahlberg, 1850 (as *Dolichopus flavipes sensu* Parent, 1938, *nec* Stannius, 1831) to the regional fauna. Maslova et al. (2011) recorded *Chrysotus laesus* (Wiedemann, 1817) from the Pskov Region, thus raising the number of known species to 92. The major part of this fauna was revealed during 1997-1998 collection seasons in the suburban zone of Velikie Luki City (Grichanov & Ovsyannikova, 2002). Comparing the Pskov species list with the dolichopodid species number in the neighboring well-studied Leningrad Region (more than 220

¹ All-Russian Institute of Plant Protection, Podbelskogo 3, 196608 St.Petersburg-Pushkin, Russia – E-mail: grichanov@mail.ru

species; see Grichanov, 2006), we suggest that much more species are to be revealed in the Pskov Region, if new districts and localities will be investigated.

This paper presents the new material on *Dolichopodidae* from the Pskov Region of Russia resulting from the short-term visit (August, 2015) to the Psovo Lake shore located at latitude 56.14°N and longitude 30.58°E. Twelve species are collected, of which seven species are firstly recorded for the Region. Most collected species are widespread across the Palaearctic Region or across Europe; nevertheless, *Sybistroma obscurella* and *Tachytrechus ammobates* are rare species in Russia. With the new data in the present paper, there are now 99 species known in the Pskov Region.

A hand net was used for collecting. Mainly wet localities at the Lake shore (except tree trunks *Medetera* was taken from) were explored. All specimens were dried and mounted on pins and placed in the museum drawers. The collectors of all specimens are the authors of the paper; their names are omitted. Specimens examined in this study are deposited in the authors' collection. The species are illustrated by the senior author with ZEISS Discovery V-12 stereomicroscope and Axio-Cam MRc5 camera. General distribution of species is given after Negrobov et al. (2013) and Grichanov (2014). Type localities are provided, and country lists are arranged alphabetically.

Material examined

Campsicnemus pusillus (Meigen, 1824)

Material. 1♂, 1♀, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: Germany: Hamburg. Palaearctic: Austria, Belgium, Czech, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Norway, Poland, Romania, Russia (Ivanovo, Kabardino-Balkaria, Karelia, Leningrad, Pskov, Ryazan', Stavropol', Vologda, Voronezh, Irkutsk, Kamchatka, Vladivostok), Slovakia, Sweden, UK.

Campsicnemus scambus (Fallén, 1823)

Material. 11♂, 17♀, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: Sweden: Esperod. Palaearctic: Austria, Belarus (Minsk), Belgium, Bulgaria, Czech, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia (Arkhangelsk, Bashkortostan, Chelyabinsk, Ekaterinburg, Kaliningrad, Karelia, Komi, Krasnodar, Leningrad, Lipetsk, Mordovia, Moscow, Murmansk, Nenetsia, Novgorod, Pskov, Ryazan', Saratov, Tver', Vologda, Voronezh, Altai, Irkutsk, S Kamchatka, Khabarovsk, Khantia-Mansia, Krasnoyarsk, Vladivostok, Yakutia, Yamal), Slovakia, Sweden, Switzerland, UK, Ukraine (Kherson, Odessa).

Dolichopus latilimbatus Macquart, 1827

Material. 4♂, 3♀, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: not given ["Nord de France"]. Palaearctic: Abkhazia, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, France, Germany, Hungary, Iran, Ireland, Italy, Kazakhstan, Mongolia, Netherlands, Poland, Romania, Russia (Karachai-Cherkessia, Krasnodar, Kursk, Moscow, Orel, Pskov, Rostov, Ryazan, Ural, Voronezh, Yakutia), Slovakia, Spain, Sweden, Switzerland, Turkey (Kocaeli-İzmit), UK, Ukraine (Ternopil), Uzbekistan. The species is newly recorded from Pskov Region.

Dolichopus litorellus Zetterstedt, 1852

Material. 1♀, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: not given ["Nord de France"]. Palaearctic: Abkhazia, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, France, Germany, Hungary, Iran, Ireland, Italy, Kazakhstan, Mongolia, Netherlands, Poland, Romania, Russia (Karachai-Cherkessia, Krasnodar, Kursk, Moscow, Orel, Pskov, Rostov, Ryazan, Ural, Voronezh, Altai, Omsk, Yakutia), Slovakia, Spain, Sweden, Switzerland, Turkey (Kocaeli-İzmit), UK, Ukraine (Ternopil), Uzbekistan. The species is newly recorded from Pskov Region.

***Dolichopus nitidus* (Fallén, 1823)**

Material. 1♀, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: not given. Palaearctic: Austria, Belarus, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Kazakhstan, Latvia, Netherlands, Norway, "Palestine", Poland, Romania, Russia (Karelia, Krasnodar, Leningrad, Lipetsk, Moscow, Novgorod, Pskov, Ryazan, Voronezh, Tatarstan, Altai, Khabarovsk, Khantia-Mansia, Tomsk, Vladivostok), Slovakia, Spain, Sweden, Switzerland, UK, Ukraine (Kharkiv, Odessa, Ternopil); Oriental: China (Henan, Shanghai). The species is newly recorded from Pskov Region.

***Gymnopternus metallicus* (Stannius, 1831)**

Material. 1♂, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: not given. Palaearctic: Algeria, Armenia, Austria, Belarus, Belgium, ?Bosnia and Herzegovina, ?Croatia, Czech Republic, Denmark, Egypt, Estonia, Finland, France, Georgia, Germany, Hungary, Iran, Ireland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, ?Macedonia, Netherlands, Norway, Poland, Romania, Russia (Alania, Altai, Kabardino-Balkaria, Kamchatka, Karelia, Khabarovsk, Krasnodar, Krasnoyarsk, Leningrad, Lipetsk, Novgorod, Orel, Ryazan, Vladivostok, Vologda), Slovakia, ?Slovenia, Sweden, Switzerland, Turkey (Erzurum, Kars), UK, Ukraine (Carpathians, Odessa), ?Former Yugoslavia.

***Hercostomus nigriplantis* (Stannius, 1831)**

Material. 1♂, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: Germany: Potsdam, Berlin. Palaearctic: Armenia, Austria, Belgium, ?Bosnia and Herzegovina, ?Croatia, Czech, Denmark, Estonia, France, Georgia, Germany, Hungary, Italy, Latvia, ?Macedonia, Moldova, Norway, Poland, Romania, Russia (Adygea, Buryatia, Crimea, Kabardino-Balkaria, Krasnodar, Kursk, Leningrad, Mordovia, Murmansk, Orel, Ryazan, Tatarstan, Voronezh), Slovakia, ?Slovenia, Spain, Sweden, Switzerland, UK, Ukraine (Ternopil, Poltava, Kyiv, Kharkiv), ?Yugoslavia. The species is newly recorded from Pskov Region.

***Medetera jacula* (Fallén, 1823)**

Material. 4♂, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: Sweden: Scania. Palaearctic: Armenia, Austria, Azerbaijan, Belarus, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Ireland, Italy, Kazakhstan, Netherlands, Norway, Poland, Romania, Russia (Alania, Altai, Buryatia, Crimea, Irkutsk, Kabardino-Balkaria, Kaluga, Krasnodar, Kursk, Leningrad, Mordovia, Moscow, Novgorod, Orel, Rostov, Ryazan, Sayan Mountains, Stavropol, Urals, Vologda, Voronezh, Yakutia), Slovakia, Sweden, Switzerland, Tunisia, Turkey (Antalya), UK, Ukraine.

***Sybstroma obscurella* (Fallén, 1823) (Fig. 1)**

Material. 5♂, 2♀, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: Sweden: "Esperöd Scan" Palaearctic: Abkhazia, Czech Republic, Denmark, France, Georgia, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Romania, Russia (Adygea, Crimea, Krasnodar, Mordovia, Pskov), Sweden, Switzerland, Turkey (Bursa, Çanakkale, Kırklareli), UK, Ukraine, Former Yugoslavia. The species is newly recorded from Pskov Region.



Fig. 1. *Sybistroma obscurella* (Fallén, 1823), habitus.

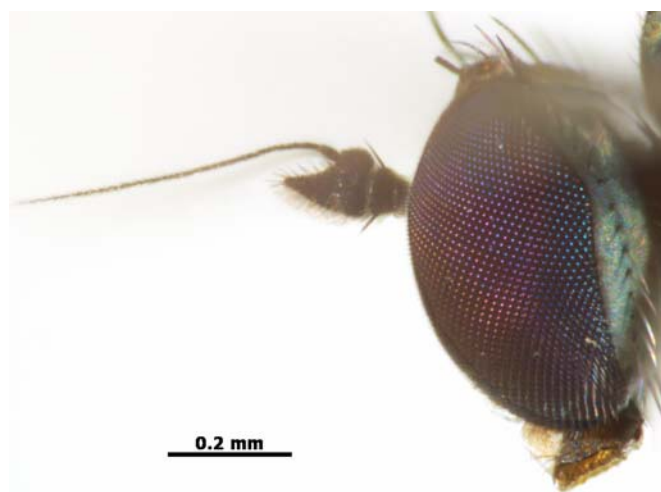


Fig. 2. *Sympycnus pulicarius* (Fallén, 1823), head.

***Sympycnus pulicarius* (Fallén, 1823) (Fig. 2)**

Material. 7♂, 8♀, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: not given [Sweden]

Palearctic: Austria, Azerbaijan, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iran, Ireland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Romania, Russia (Alania, Altai, Kabardino-Balkaria, Kaliningrad, Karachai-Cherkessia, Karelia, Leningrad, Murmansk, Novgorod, Pskov, Ryazan, Stavropol, Vologda, Voronezh, Krasnoyarsk), Slovakia, Spain, Sweden, Switzerland, Turkey (Aydın, Muğla, Van), UK, Ukraine, Former Yugoslavia; Nearctic: California.

***Syntormon metathesis* (Loew, 1850) (Fig. 3)**

Material. 1♂, 1♀, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: Germany. Palearctic: Austria, Belgium, Czech Republic, Estonia, Finland, France, Germany, Hungary, Latvia, Netherlands, Poland, Romania, Russia (Krasnodar, Leningrad, Orel, Pskov, Ryazan, Saratov, "Ural", Voronezh), Slovakia, Spain, Sweden, Switzerland, "Turkey". The species is newly recorded from Pskov Region.

***Tachytrechus ammobates* (Haliday, 1851) (Figs. 4-5)**

Material. 2♂, Russia: Pskov Region, Psovo Lake, 21-23.VIII.2015.

Distribution. Type locality: Sweden; Germany. Palearctic: Austria, Belarus, Belgium, Denmark, Estonia, Finland, France, Germany, Latvia, Netherlands, Norway, Poland, Russia (Karelia, Leningrad, "Siberia"), Sweden. The species is newly recorded from Pskov Region.



Fig. 3. *Syntormon metathesis* (Loew, 1850), habitus.



Fig. 4. *Tachytrechus ammobates* (Haliday, 1851), head.



Fig. 5. *Tachytrechus ammobates* (Haliday, 1851), fore tarsus.

Acknowledgments

This paper was partly supported by the grant of the Russian Foundation for Basic Research N 14-04-00264-a to Oleg P. Negrobov.

References

- Antipova, L. F. & T. V. Baikova. 2002.** Insects of Pskov Region. Pskov: PGPI, pp. 1–334.
- Grichanov, I. Ya. 2006.** A checklist and keys to North European genera and species of Dolichopodidae (Diptera). St.Petersburg: VIZR, pp. 1–120 (Plant Protection News Supplements).
- Grichanov, I. Ya. 2014.** Alphabetic list of generic and specific names of predatory flies of the epifamily Dolichopodoidae (Diptera). St.Petersburg: VIZR, pp. 1–544. (Plant Protection News, Supplements, N14). Available from <https://archive.org/details/Grichanov2014DoliBank> (accessed 16 July 2015).
- Grichanov, I. Ya. & E. I. Ovsyannikova. 2002.** First Report on the Fauna and Ecology of Predatory Dolichopodid Flies (Diptera, Dolichopodidae) of Pskov Province. *Entomologicheskoe obozrenie* 81 (4): 834–842. (In Russian; English translation: *Entomological Review*, 2002, 82 (7): 832–838).
- Maslova, O. O., Negrobov, O. P. & O. V. Selivanova. 2011.** Russian fauna of the genus *Chrysotus* Meigen (Diptera, Dolichopodidae). Part 1. Species of the *Ch. cilipes* Meigen and *Ch. laesus* Wied groups. *Entomologicheskoe obozrenie* 90 (2): 464–468. (In Russian; English translation: *Entomological Review*, 2011, 91 (8): 969–972).
- Negrobov, O. P. 1991.** Family Dolichopodidae. In: Sóos, Á. & L. Papp (Editors). *Catalogue of Palaearctic Diptera*. Vol. 7. Dolichopodidae–Platypezidae. Budapest: Akadémiai Kiadó, pp. 11–139. <http://dx.doi.org/10.1016/B978-0-444-98731-0.50008-9>.
- Negrobov, O. P., Selivanova O. V., Maslova, O. O. & M. A. Chursina. 2013.** Check-list of predatory flies of the family Dolichopodidae (Diptera) in the fauna of Russia. In: Grichanov I. Ya. & O. P. Negrobov (Editors). *Fauna and taxonomy of Dolichopodidae (Diptera). Collection of papers*. (Plant Protection News, Supplements, N9). St.Petersburg: VIZR, pp. 1–96. Available from <https://archive.org/details/GrichanovNegrobovDolichopodidae2013> (accessed 16 July 2015).
- Przhiboro, A. A. & I. Ya. Grichanov. 2003.** Three new records of Dolichopodidae from NW Russia (Diptera). *Zoosystematica Rossica* 11 (2): 346.

Research Article

<http://zoobank.org/urn:lsid:zoobank.org:pub:7DCA5420-0101-4902-BC85-E1701CC16608>

Parapolybia escalerae (Meado-Waldo)
from SE Turkey with further faunistical records
(Hymenoptera, Vespidae, Polistinae)

Muhabbet Kemal Ahmet Ömer Koçak

Abstract: *Parapolybia escalerae* (Meado-Waldo) from SE Turkey with further faunistical records (Hymenoptera, Vespidae, Polistinae). Cesa News 110: 6-9, 3 figs. 1 map.

In this paper, occurrence of *Parapolybia escalerae* (Meado-Waldo) in SE Turkey is discussed. Faunistically, new provincial record is given. Observations in nature are illustrated. A distributional map is added.

Key words: *Parapolybia escalerae*, Hymenoptera, Vespidae, Polistinae, Turkey, Şırnak, Hakkari, Beytüşşebap, Çukurca, fauna

***Parapolybia escalerae* (Meado-Waldo, 1911)**

A single female of the species, preserved in the British Museum (London), was described by Meado-Waldo (1911) from Iran. Also a single female of this species was reported from West of Kaval (Hakkari Province) SE Turkey by Gusenleitner (1988) for the first time. Koçak & Kemal (2015) listed this species as nr.5687, together with distributional information. Here, the authors give the collecting and pictorial information on the behaviour of this wasp.

The first specimens were observed by the authors by day, very near cold stream sides at Oymakaya (Dule) valley in August (**Figs. 1,2**) very weak, quiet, and very close to the ground. It was observed always singly. Later, inside the Güzeldere village (Çukurca district), 8 specimens were also observed and collected on the wet ground (**Fig.3**), together with *Neohipparchia parisatis* (Satyridae, Lepidoptera).

Currently, the species is very rare and locally known from SE Turkey (Şırnak and Hakkari Provinces), Iran, and North West Pakistan (Chitral)² (**Map 1**). The collecting information in Oymakaya valley (Beytüşşebap district, Şırnak Prov.), and Güzeldere (Çukurca district, Hakkari Prov.) are new faunistical records.

Material examined (16 specimens): 8 specimens, Turkey, Şırnak Prov., Beytüşşebap, Dule valley Öküz mağarası 1250m 15-16 8 2013 M Kemal & A.Koçak leg.; 8 specimens from Hakkari Province, Çukurca, Güzeldere 1135m, 17 8 2013 M. Kemal leg. (coll. Cesa).

² http://www.boldsystems.org/index.php/Taxbrowser_Taxonpage?taxid=106266



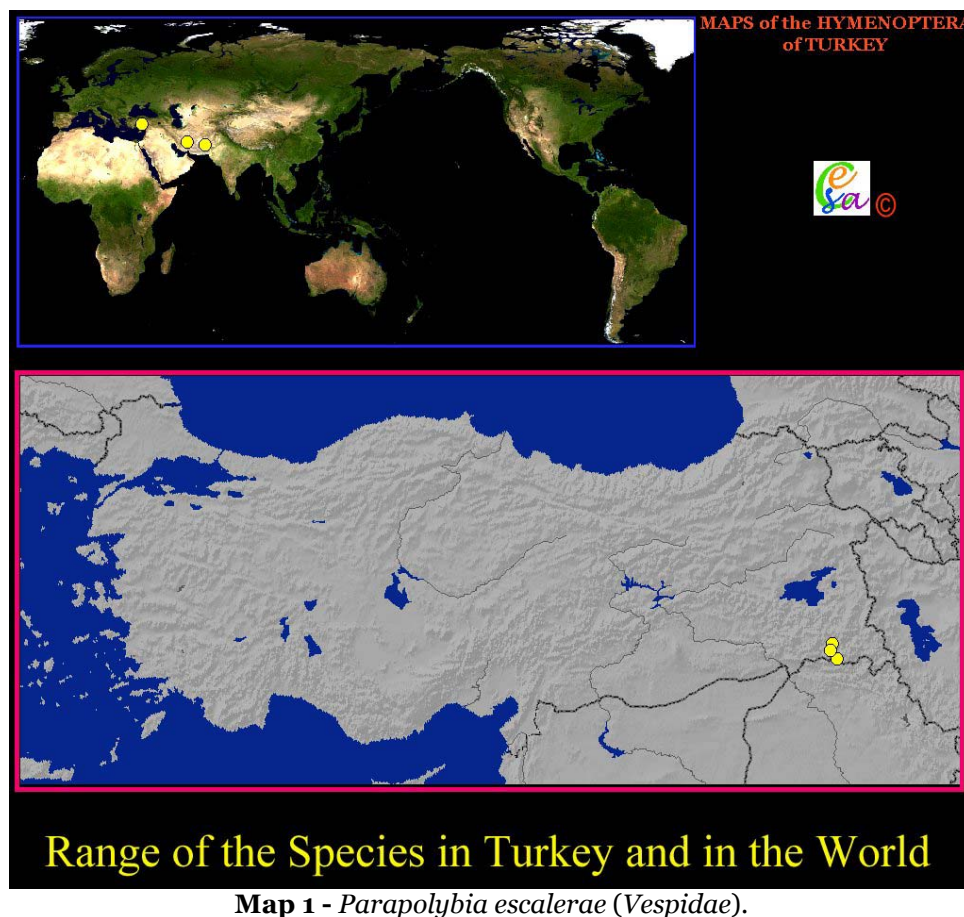
Fig. 1 - *Parapolybia escalerae* (Vespidae). Turkey, Şırnak Prov., Beytüşşebap, Dulê valley, near Öküz mağarası 1250m 15-16 8 2013 M Kemal photo & leg. (Cesa)



Fig. 2 - *Parapolybia escalerae* (Vespidae). Turkey, Şırnak Prov., Beytüşşebap, Dulê valley, near Öküz mağarası 1250m 15-16 8 2013 M Kemal photo & leg. (Cesa)



Fig. 3 - *Parapolybia escalerae* (Vespidae). Turkey, Hakkari Province, Çukurca, Güzeldere 1135m, 17 8 2013
M. Kemal photo & leg. (Cesa)



Acknowledgement

We sincerely thank to Mr. Fahri Ecer and his family for their kind hospitality, and helps during our excursions in 2013. We also thank to Dr. J. Gusenleitner (Austria, Linz) for his kind help in identification of the species.

References

- Gusenleitner,J.,1988**, Neue und bemerkenswerte Faltenwespen aus der Türkei (Hymenoptera, Vespoidea). *Linzer biol. Beitr.* 20 (2): 713-737.
- Koçak,A.Ö. & M.Kemal, 2015**, Hymenoptera of Turkey. *Priamus* (Suppl.) 38: 1-393, 79 dual maps, 3 tab.
- Meade-Waldo,G., 1911**, New species of Diploptera in the Collection of the British Museum. Part III. *Ann. Mag. nat. Hist.* (8) 7: 98-113.
- Schulthess,A.v., 1913**, Parapolybia Saussure Vespidae sociales. *Mitt. schweiz. ent. Ges.* 12 (4): 152-164, Pls.xi, xib.

Research Article

<http://zoobank.org/urn:lsid:zoobank.org:pub:925FC406-BB7B-452C-8693-54868305AC4A>

A pictorial forest pest report of *Leucoma salicis* (*Lymantriidae*, *Lepidoptera*) at Nemrut Caldera (Bitlis Province, East Turkey)

Muhabbet Kemal Ahmet Ömer Koçak

Abstract: A pictorial forest pest report of *Leucoma salicis* (*Lymantriidae*, *Lepidoptera*) at Nemrut Caldera (Bitlis Province, East Turkey). *Cesa News* 110: 10-13, 9 figs.

In this short paper, destruction of the caterpillars of *Leucoma salicis* (*Lymantriidae*) on the foliage of *Populus tremula* in the Nemrut Caldera is discussed and illustrated.

Key words: *Leucoma salicis*, *Lymantriidae*, *Lepidoptera*, *Populus tremula*, Nemrut Caldera, Bitlis, Turkey, forest pest.

During an excursion to the Nemrut Caldera in 2015, organized by the authors, caterpillars of *Leucoma salicis* (*Lymantriidae*), a serious pest on the foliage of *Populus tremula* has been observed. In the mid of June, most of the *Populus* trees were defoliated by numerous caterpillars. At the same time, young, or grown caterpillars, also pupal stages can be frequently seen on every trees. This destruction of *Populus* woodland in the Caldera has not been reported so far. The authors have never seen such a devastation in the last decade (Koçak & Kemal, 2015). Below, the observations of the habitats and larval destructions are illustrated.



Fig. 1 – *Leucoma salicis*, feeding on the leaves of *Populus tremula*. Full grown larva. Nemrut Caldera, İlköl 2250m 12 6 2015, M Kemal (Cesa)



Figs. 2, 3 – *Leucoma salicis*, Full grown larvae in cocoon. Nemrut Caldera, İlköl 2250m 12 6 2015, M Kemal (Cesa)



Figs. 4,5 – *Leucoma salicis*, prepupal and pupal instars in cocoon. Nemrut Caldera, İlköl 2250m 12 6 2015, M Kemal (Cesa)



Figs. 6,7 – *Leucoma salicis*, density of larval population and the effect on *Populus* trees. Nemrut Caldera, Ilıkgöl 2250m 12 6 2015, M Kemal (Cesa)



Fig. 8 – *Leucoma salicis*, male. Nemrut Caldera, Ilıkgöl 2250m 12 7 2015, ex larva. M Kemal (Cesa)



Fig. 9 – An aspect of the defoliated *Populus tremula* population in Nemrut Caldera, Ilıkgöl 2250m 12 6 2015, M Kemal (Cesa)

Reference

Koçak,A.Ö. & M.Kemal, 2015, Nemrut Kalderası'nın diurnal Lepidopterlerinin habitat tercihlerinin karşılaştırmalı analizi (Bitlis, Türkiye). *Priamus* Suppl. 37: 1-57, figs.

C o n t e n t s : Grichanov, I. Ya. & Elena I. Ovsyannikova, New records of Dolichopodidae from Pskov Region of Russia (Diptera, Empidoidea), p.1 - **Kemal,M. & A.Ö.Koçak**, *Parapolybia escalerae* (Meado-Waldo) from SE Turkey with further faunistical records (*Hymenoptera*, *Vespidae*, *Polistinae*), p. 6 - **Kemal,M. & A.Ö.Koçak**, A pictorial forest pest report of *Leucoma salicis* (*Lymantriidae*, *Lepidoptera*) at Nemrut Caldera (Bitlis Province, East Turkey), p. 10 - **Editorial**, p. 14.

Centre for Entomological Studies Ankara



(A scientific Consortium)

(co-operation of research workers for pure-scientific, not commercial purpose)

Web Page of the Cesa: <http://www.cesa-tr.org/>

Scientific Serials: Priamus & Supplement (ISSN 1015-8243)³, Miscellaneous Papers (ISSN 1015-8235)⁴, Memoirs (ISSN-8227)⁵ DVD Films⁶, Iconographia Insectorum⁷ Cesa Publications on African Lepidoptera (series)⁸, Cesa News [online]⁹, Cesa Books¹⁰

Owners / Sahipleri - Editors / Yayıncılar: Prof. Dr. Ahmet Ömer Koçak (c/o Yüzüncü Yıl University, Turkey) - Editor Assistant: Asst. Prof. Dr. Muhabbet Kemal Koçak (c/o Yüzüncü Yıl University, Turkey).

Editorial Board of all Scientific Serials / Bütün Bilimsel Yayınların Yayın Kurulu: Insecta, taxonomy, nomenclature, ecology, faunistics: Prof. Dr. Ahmet Ömer Koçak (Yüzüncü Yıl Üniversitesi, Turkey), Asst. Prof. Dr. Muhabbet Kemal Koçak (Yüzüncü Yıl University, Turkey), Assoc. Prof. Dr. Selma Seven (Gazi University, Turkey); Homoptera: Dr. Emine Demir (Turkey). Coleoptera / Chrysomelidae: Assoc. Prof. M.S.Mohammedsaid (Malaysia). - Plant taxonomy, flora and vegetation: Asst. Prof. Dr. Fevzi Özgökçe, Asst. Prof. Dr. Murat Ünal (Yüzüncü Yıl University, Van, Turkey).

ALL RIGHTS RESERVED

Correspondences should be addressed to: Prof. Dr. Ahmet Ömer Koçak, c/o Yüzüncü Yıl University, Fen Fakültesi, Biyoloji Bölümü, Kampus, Van / Turkey. - e-mail: cesa_tr@yahoo.com.tr

All serials are recorded regularly by the Zoological Record,
Thomson Reuters, Enterprise House, Innovation Way, Heslington, York, YO10 5NQ, United Kingdom
ts-emea-york.dcsadmins@thomson.com

³ <http://www.cesa-tr.org/Pri.htm> - pdf available after corresponding

⁴ <http://www.cesa-tr.org/Miscell.htm> - pdf available after corresponding

⁵ <http://www.cesa-tr.org/Memoirs.htm> -

⁶ <http://www.cesa-tr.org/CDF.htm>

⁷ <http://www.cesa-tr.org/Icon.htm>

⁸ http://www.metafro.be/Members/Cesa/internet_sayfas305/base_view - pdf available

⁹ <http://www.cesa-tr.org/Cesanews.htm>

¹⁰ <http://www.cesa-tr.org/Cesabooks.htm>